



Production Readiness Checklist

FIELD GUIDE - TWENTY CHECKS FROM REAL INCIDENTS

Use the sections that fit your architecture before a launch, migration or on-call handover. The value is not in ticking every box. It is in finding the assumptions where the honest answer is: I do not actually know.

20 CHECKS	4 RISK AREAS	4 REAL INCIDENTS
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RISK AREA
01

Message handling and acknowledgment

Queues, brokers and event buses where work can disappear after a component reports success.

- ☐ **The acknowledgment happens after the work, not after the receive.** Anything that acknowledges on delivery has converted a crash into silent data loss.
- ☐ **The consumer confirms execution rather than assuming it.** A downstream call that returned 200 is not the same as a downstream that committed.
- ☐ **Redelivery is bounded.** Unbounded retry turns a loss bug into a hot loop, which is worse and louder.
- ☐ **Transient and terminal failures are handled differently.** Retrying a malformed payload forever is not resilience.
- ☐ **Dropped work is observable.** If the only symptom is a number that should have gone up and did not, you will find out from a customer.

INCIDENT BEHIND THESE CHECKS: [The Acknowledgment Gap](#). Every component reported success while messages were being lost.

RISK AREA
02

Request capacity and dependencies

Services with a bounded pool of workers, threads or connections serving requests.

- ☐ **Every outbound call has a deadline.** The deadline is smaller than the caller's. A call with no timeout is a worker you have lent out indefinitely.
- ☐ **Retries have a budget, not just a count.** Three retries per request across three layers is twenty-seven calls.
- ☐ **Worker occupancy is a graph you can look at.** Latency and error rate will not tell you that the pool is full.
- ☐ **Readiness does not depend on every downstream.** A probe that calls everything can convert a partial outage into a total one.
- ☐ **You know what happens at saturation.** Shedding load is a decision. Queueing until the deadline is also a decision, made by default.

INCIDENT BEHIND THESE CHECKS: [When "no healthy upstream" is not about the upstream you think](#). Retries turned dependency latency into worker exhaustion.



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REVIEW WORKSHEET - CONTINUED

RISK AREA
03

Replacing a live data path

Migrations where an old and a new system must both be correct for a while.

- ☐ **The migration transfers authority, not just data.** Name the moment the new system starts being the one that decides.
- ☐ **The shadow path compares decisions, not payloads.** Two systems can disagree on every field and agree on every outcome, or the reverse.
- ☐ **The target is zero unexplained differences.** Explained differences are progress. Unexplained ones are the whole risk.
- ☐ **Coverage is measured across scenarios, not request volume.** A million requests through one code path proves one code path.
- ☐ **Rollback does not require a deploy.** If reverting means shipping, you will not revert at 3am.

INCIDENT BEHIND THESE CHECKS: [Replacing a Critical Data Path Without a Flag Day](#). Two valid data sources disagreed on the business decisions that mattered.

RISK AREA
04

Rollout and schema coordination

Applications running more than one replica while one-shot work or schemas change.

- ☐ **One-shot work runs once.** A Deployment starts multiple copies of a long-running process. A migration is not that shape.
- ☐ **Coordination is not compatibility.** A lock stops two migrations colliding. It does nothing about old pods serving traffic against a new schema.
- ☐ **Schema changes are expand-and-contract.** Add compatible, deploy both-aware code, backfill, switch, then remove.
- ☐ **Waiting is logged as waiting.** Expected contention that surfaces as a crash loop will be debugged as an outage.
- ☐ **A failed migration stops the rollout.** Do not let the application start against a schema it does not understand.

INCIDENT BEHIND THESE CHECKS: [When Three Kubernetes Pods Try to Run One Database Migration](#). Replicas, migration ownership and schema compatibility collided during startup.

Keep the live version beside your change

Tick items online, copy the current state into a pull request or review document, and follow each incident for the reasoning behind the check.

<https://www.sahansera.dev/production-readiness/>

